

ABSTRACT

METHODS FOR PRODUCING HALOGENATED ALKENE COMPOUND AND FLUORINATED
ALKYNE COMPOUND

- 5 A halogenated alkene compound and a halogenated alkyne
compound are obtained at a high conversion rate and high
selectivity by employing any of the following methods (1) to (4):
- (1) a halogenated butane compound represented by
CX¹X²X³CHX⁴CFHCX⁵X⁶X⁷, wherein X¹, X², X³, X⁴, X⁵, X⁶, and X⁷ are the
10 same or different and each is a halogen atom, to a
dehydrofluorination reaction;
- (2) a halogenated butene compound represented by
CX¹X²X³CX⁴=CHCX⁵X⁶X⁷, wherein X¹, X², X³, X⁴, X⁵, X⁶, and X⁷ are as
defined above, to a dehydrohalogenation reaction;
- 15 (3) a halogenated alkane compound represented by
CHX⁸A¹CHX⁹A², wherein A¹ and A² are each a fluorine atom or a
perfluoroalkyl group, and X⁸ and X⁹ are the same or different and
each is a halogen atom, to a dehydrohalogenation reaction in the
presence of a catalyst in a gas phase; and
- 20 (4) a halogenated alkene compound represented by
CX⁸A¹=CHA², wherein A¹, A², and X⁸ are as defined above, to a
dehydrohalogenation reaction in the presence of a catalyst.

25 [No Suitable Figure]